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Prelim

United States Department of Agriculture
Bureau of Agricultural Economics

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The attached report, "A Conversion Program for the Cotton South," was prepared in April 1945 as a result of widespread interest in one of the long-range policy alternatives suggested last December by Claude R. Wickard, then Secretary of Agriculture, at a hearing of the Special Committee, of the House Committee on Agriculture, on Post-War Farm Programs (the Pace Committee).

This preliminary draft of the report has been circulated among a number of persons both inside and outside the Department of Agriculture who are interested in long-range agricultural policy, particularly as it would affect the Cotton South.

Several important developments have taken place since the preliminary report was issued. In many instances, for example, more recent statistics are available or soon will become available from specific research projects now under way. World events which were merely foreshadowed last spring now are actualities. Germany and Japan have been defeated. A world organization has been formed and its charter ratified by the leading United Nations, including this country. Extension of the Reciprocal Trade Agreements Act, ratification by the United States of the Bretton Woods Agreements, and this country's decision to participate in the United Nations Food and Agriculture Organization are other signs that point to increased international collaboration and expanded world trade. A comprehensive program of research on the cotton problems of the South, that should clear up some of the significant questions which either were unanswered or only partially answered when the preliminary document was prepared, also has been launched and is now being carried forward vigorously.

When the attached report was completed last spring, it was given limited circulation with the primary aim of stimulating suggestions and comments. Many such suggestions already have been received from representatives of Department of Agriculture agencies and the Federal-State Extension Service, and from persons outside of Government, including farmers, farm editors, and economists. A number of the suggestions grew out of a series of conferences with three Southern regional committees on post-war programs. These criticisms and suggestions have made it plain that the preliminary manuscript should be revised at several points ranging from questions of wording to questions of fact.

For example, it is apparent that the need for expanded world commerce and for taking action against national and international and industrial and business monopolies should have been set forth much more clearly than it was. It also should have been made clearer that the estimates of the nature and volume of Southern agricultural production that might be expected at the end of a conversion program represented only a rough approximation of what the results of

such a program might be, and were in no sense a recommended ceiling either for total Southern farm production or for the region's production of individual commodities. The improvement of farming methods and progress toward diversification made in recent years, as well as the development of industry in the South during the same period, have given abundant proof of the vigor and resourcefulness of Southern agriculture, business, and labor.

It is also clear that the examples of how a conversion program might work on individual farms can be greatly improved. Last spring when the report was being prepared, the examples of how the program might work in the Southern Piedmont and High Plains were based on data that were immediately at hand. Since their purpose was purely illustrative neither refinement nor detailed representation of conditions in any specific area was attempted. That some of the yield, expense, and other items used in these illustrations would be challenged by some of the people in the region was to be expected. The discussion should have indicated more clearly their illustrative nature and thus have forestalled the implication (entirely unintentional) that each illustration represented the norm of the program's operation. This obviously could not be the case. The examples were designed to illustrate the more extreme types of adjustment that would be needed. In each county a number of farms would need no conversion at all. Many of the others already would have a sufficient land base to make conversion a matter of improved organization and practices rather than of additional land. Truly adequate estimates of how the program might work on individual farms can be made only after studies of actual conditions in sample counties have been made. Such studies in turn would provide the basis for much firmer estimates of over-all regional production, of farm income that might be expected with a conversion program, and of the costs of such a program than were possible when the preliminary report was prepared. These studies, to be carried on cooperatively with the experiment stations of the South and the U. S. Department of Agriculture, are now beginning.

When the preliminary report was issued last spring it was the intention of BAE, as the foreword indicated, to issue a revision fairly promptly in the light of criticism and comments received. By now it is apparent that despite the great value of the suggestions already received, a detailed revision of the report should be held in abeyance pending further progress on a number of intensive research projects now under way that will go far toward supplying the necessary data to fill present gaps. Last May at the Research Conference on the Postwar Agricultural and Economic Problems of the Cotton Belt, held at Memphis, on the invitation of the National Cotton Council of America and at the request of the House agricultural subcommittee, plans for a series of short-time research projects to require from 6 to 18 months each were definitely formed. These projects, most of which are now well under way, cover the following fields:

1. Production adjustments to improve farming opportunities by subareas
2. Cotton handling and marketing problems
3. Cotton goods production and distribution techniques, costs and margins
4. The competitive position of fibers and substitute products in specific end use markets
5. Production studies of synthetic and other substitute products
6. Foreign market outlets for American cotton and cotton products
7. Agricultural programs and policies
8. Enterprise problems
9. Labor resources and the problems inherent in them
10. Technology and capital
11. Industrial development opportunities in the Cotton Belt, by areas and localities
12. Education problems
13. Health problems

Launching of this integrated research project, which was not contemplated when the preliminary report was prepared, has made it clear that a quick revision of the preliminary report, in advance of the findings of the research groups, would be of small, if any, value. However, since there is a continuing interest in the general approach to the cotton problem embodied in the conversion report, copies of the preliminary version are still being made available upon request, to a limited number of persons for comment and suggestions.

United States Department of Agriculture
Bureau of Agricultural Economics

A CONVERSION PROGRAM FOR THE COTTON SOUTH

The considerable interest aroused by Secretary Wickard's suggestion last December that a thoroughgoing conversion program be considered among the possible approaches to the problems of Southern agriculture, has led a group in the Bureau of Agricultural Economics to explore further the nature and possibilities of such a conversion program. The group has considered the major steps that would be involved and has made some tentative estimates of what they might accomplish and how much they might cost. The following draft embodies the main points of the study to date. Its present form necessarily is highly preliminary. It is being made available for criticism and discussion to a few key people both inside and outside the U. S. Department of Agriculture who are especially interested in Southern agricultural problems and conditions. Its future development will depend largely on comments and suggestions received.

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CONTENTS

	Page
Introduction	1
Conversion from What?	2
Conversion to What?	7
Agricultural Conversion and Industrialization	11
How to Convert	25
Probable Effects of the Program	36
How Much Would Conversion Cost?	39
What About Other Approaches?	45
Summary	52

A CONVERSION PROGRAM FOR THE COTTON SOUTH

INTRODUCTION

Cotton, the chief cash crop of millions of farm people in the South, will be under heavy pressures in the years after the war. The impossibility of exporting significant amounts of United States cotton at parity prices is generally recognized. The proportion of the home market for cotton which could be maintained at parity prices against the competition of synthetic fibers and other materials becomes increasingly problematical.

The people who grow cotton will be subjected to still other pressures. Mechanization and other improved methods that cut costs of production are not equally applicable in all cotton-growing areas. Where mechanization is adopted, it will mean further displacement of farm families in an area where farm land already is more overcrowded than in any other region.

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Secretary Wickard assessed this formidable problem in a statement made December 4, 1944, before the Special Committee of the House Committee on Agriculture on Post-War Farm Programs. He listed four possible approaches that might serve as bases for national policy. The fourth of these approaches, which the Secretary termed a Reconversion Program for the Cotton South, has awakened particularly wide interest.

The distinctive feature of this approach is its assumption that no lasting solution to the problems of cotton can be developed in terms of cotton alone; but that the whole pattern of agriculture and, in fact, of the entire economy of the region, should be considered.

CONVERSION FROM WHAT?

More than one-half of the Nation's farm population lives in the South.^{1/}

These people till about one-third of the Nation's cropland and receive about one-fourth of the Nation's farm income.

Cotton is by far the most important cash crop in the region, accounting for nearly a third of the area's total farm income. About one-half of the South's 3 million farm families grow cotton, and it is the chief source of cash income for the great majority of those who grow it.

During the 10 years ending with 1942, gross income from farming averaged \$865 per family in the South,^{2/} compared with \$2,073 for farm families in other parts of the country. Too many Southern people are trying to make a living on the land.

Cotton's Competitors

The present income difficulties of many of the South's farm families are only one measure of probable future difficulties. Trouble is ahead for American cotton. Its competitive position is threatened by the great increase in supplies of foreign-grown cotton and by the steady rise in importance of synthetic fibers and paper products.

^{1/} Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Kentucky, Louisiana, Arkansas, Oklahoma, and Texas. (The Census South, minus Maryland and Delaware.) Treating the 14-State area as a unit does not imply that many phases of the conversion program would not apply to cotton producers outside its limits. The area has been used to help illuminate the problem, not to limit the field of any future program.

^{2/} Includes owner-operators, tenants, sharecroppers, and farm laborers. Unless otherwise noted, the term "farm families" is used in that inclusive sense throughout this discussion.

Foreign Growths

There has been a steady increase in the cotton production of foreign countries. In 1920, shortly after the close of the first World War, production of foreign cotton totaled less than 7 million bales. In 1936 foreign production totaled over 18 million bales. Consumption of American cotton outside the United States declined 46 percent between the 1932-33 and 1938-39 seasons. Consumption of foreign growths increased 69 percent during the same period.

During the war, as well as during the uneasy years that immediately preceded its outbreak in Europe, foreign production declined. But foreign consumption declined too. By August 1, 1944, stocks of foreign cotton stood at the record level of 14,380,000 bales--nearly twice as large as in 1939. Stocks on August 1, 1945, are expected to be even larger.

Rayon

United States production of rayon in 1920 totaled about 10 million pounds. In 1944 domestic rayon production came to 724 million pounds, the equivalent of about 1,700,000 bales of cotton.

World production of rayon has increased even more rapidly than production in the United States, rising from 33 million pounds in 1920 to nearly $3\frac{1}{2}$ billion pounds--the equivalent of 8,200,000 bales of cotton--in 1942.

A steadily increasing proportion of total rayon production, both in this country and abroad, is in the form of staple fiber, which can be used on cotton or wool spinning and weaving machinery, and which in this country already has been reduced in price to a point about equal to that of middling 15/16-inch cotton.

Paper

In a number of products--notably towels, tissues, napkins, window shades, plastics, twine, and multi-wall bags--paper competes increasingly with cotton. Altogether, about a million bales of cotton were used in such products in 1939. Although during the war the demand for both cotton and paper has increased, the marked trend toward greater use of paper goes back to a time well before the war. For example, while the production of cotton towels went up a little more than half from 1929 to 1939, that of paper towels increased nearly threefold.

Declining Exports

The increasing competition of foreign-grown fibers and foreign-manufactured synthetics, as well as the growing obstacles to world trade, was reflected in the decline of exports of United States cotton in the decade before the second World War. During the 1920's and the early 1930's exports of 7 million and 8 million bales were commonplace. From 1933 on, the decline was sudden and large. United States exports totaled about 3.5 million bales in the 1938-39 crop year, the smallest volume in 50 years. Exports of 6.5 million bales in 1939-40, by far the largest of any recent year, probably resulted largely from the efforts of foreign countries to increase their cotton supplies on the eve of war, as well as of the cotton export subsidy employed by this country. Since then, because of the war, United States cotton exports have averaged less than $1\frac{1}{2}$ million bales a year.

Increasing Mechanization

These developments pose tremendous problems for the farm families who derive most or all of their cash incomes from cotton production, and for the industries and institutions which serve these people. The position

of many Southern farm families will be further threatened by the great strides in mechanization of cotton production that are practically certain to occur.

Technological developments within the next few years may do away with all of the seasonal labor peaks in cotton growing in many areas. In the High Plains cotton-producing area, hand-snapping is now the great remaining manpower requirement. Through mechanization, the labor requirements up to harvest time already have been reduced to 4 or 5 man-hours per acre. With the end of hand-snapping through use of the 2-row mechanical stripper, the total labor requirements for the entire process of production would be cut to about 8 man-hours an acre, about one-half of the present requirement. In the Mississippi Delta the use of tractors, cross-cultivation, and mechanical pickers would reduce the labor requirements to about one-fifth of the man-hours used now in connection with one row mule equipment and hand picking.

Mechanization and other improvements in production offer many producers a way out of the competitive price difficulty. They could enable many growers to produce at a profit at prices much below present levels. But many farms are disqualified by reason of their size or other physical limitations from the advantages of full mechanization. Thus in a region where family farm incomes already are too low, and much of the agricultural population already is underemployed, the situation after the war will be aggravated by the growing competition faced by cotton and by the increasing mechanization of its production.

The Cotton Dilemma

When viewed in the light of cotton alone, the situation presents a grave dilemma. The device of holding the price of cotton above a competitive level would tend to restrict consumption in relation to its extent and effectiveness. Subsidies to enable cotton to compete in the export market would become less and less effective as other nations retaliate. The alternative proposal of letting cotton prices fall to a competitive level and maintaining growers' returns through income payments would put a heavy drain on the Federal Treasury and make cotton growers dependent on year-to-year Government payments. Both approaches would encourage survival of cotton on farms unsuited to its production, and thus would perpetuate the very conditions that made assistance necessary in the first place.

CONVERSION TO WHAT?

The South has the basic resources of land and people for a stable and prosperous agriculture. Prospects for the years after the war can be bright, but only if the cotton dilemma is resolved by approaching it in broader terms than those of cotton alone. This can be accomplished. In fact, the war has heightened trends that are especially favorable to permanently better farm living.

Changes Already Under Way

Strong tides have been sweeping the Cotton South in recent years. Agriculture has become more diversified. Also it has become more efficient, so that fewer farm workers can turn out a larger volume of production.

In the later 1920's, receipts from cotton and cottonseed in the 10 principal cotton-growing States represented more than half of the area's cash farm income; by 1943 the proportion had dropped to less than one-third. Cotton acreage declined by more than one-half between 1929 and 1944. The number of workers in Southern agriculture fell from nearly 7 million in 1910 to about 4-1/3 million in 1940; while the number of workers in other industries rose from less than 4 million to over 8 million.

The war accelerated both agricultural diversification and displacement of farm workers through its demands for farm products other than cotton and for workers in nonfarm industry.

After the war, both trends will continue, but without benefit of booming war industries and of wartime price levels for cotton and many other farm products. Continued attempts to prop up cotton artificially would be bucking the main stream of history. Cotton parity prices or cotton income payments are not going to stop the machines from pushing people off the land, or to

help them after they are pushed off. Export subsidies, even if they work temporarily, will not stop synthetics from displacing cotton in the domestic market.

Instead of trying to struggle against strong tides, why not take advantage of them, harnessing their force for the greatest benefit, and curbing their destructiveness? A means of accomplishing this has been suggested.

A Conversion Program

A conversion program for Southern agriculture would move with existing trends in its effort to bring about higher levels of living and fuller opportunities for farm people.

The distinctive feature of such an approach should be emphasis on people rather than on cotton or any other particular commodity. It would not aim at encouraging a larger volume of cotton production than domestic and foreign markets would take over the long pull. Neither would it aim at cutting cotton acreage drastically simply for the sake of maintaining a certain price, with no regard for how many farm families might be forced off the land. It would fully recognize that much of the land and many of the people of the South are particularly adapted to growing cotton, and would encourage the efficient production of cotton as strongly as it discouraged inefficient production.

The Core of the Program

Ultimately, an agricultural conversion program for the South should aim at balanced, diversified farming on adequate family units. In order to get from where we are now to where we want to go, action would be taken along three lines.

First, cotton would be priced at a level that would enable it to compete freely in foreign and domestic markets.

Second, Government payments would be made to cushion the descent of cotton prices to a competitive level; and Government payments, credit, and other assistance also would be offered to help farm families convert from their present patterns of operation.

Third, steps would be taken to develop off-farm employment opportunities for many of the people now in agriculture.

Several supplementary actions would be required, just as they would for any other kind of program. Efforts to help farmers maintain and improve soil fertility would be essential. So would programs to extend rural electrification, improve housing, health facilities and communications, to encourage ownership of family farms, and to bring about many other necessary improvements in rural living.

An Advance on a Broad Front

Such a conversion program would be a tremendous undertaking. Millions of farm people would have to change their ways of doing things. Many would have to enlarge their farms; many others would need to leave agriculture. Large-scale efforts would be required both to help farm people find non-agricultural employment and to stimulate nonfarm employment opportunities. Farmers would be asked to give up familiar types of assistance for new ones. Many of the changes and displacements, of course, eventually would occur without the conversion program; thoughtful farmers already realize the long-term uncertainties of cotton price supports and payments. Nevertheless, a program that frankly recognizes the coming changes and proposes to do something about them will be regarded by many as a disturbing innovation.

But the suggested conversion program is the one proposal thus far that offers any well-based hopes for progress toward lasting solution of the problems of the Cotton South. It would enable cotton to stand on its own

economic feet. It would direct the trends toward mechanization and diversification instead of resisting them.

By encouraging diversified farming on adequate farm units, the conversion program works toward a time when returns from farm marketings alone can yield good family incomes. Pending complete achievement of that aim, the program offers a firm basis for whatever supplementary aid may be needed by farmers.

Relationship to Full Employment

The effectiveness of such a conversion program would depend to a great extent upon the extent of nonfarm employment and level of nonfarm income, in both the South and the whole Nation.

So does the effectiveness of any other agricultural program that could be devised. How long could large income payments on cotton be maintained with millions unemployed and national revenues dropping; how long would the Nation be willing to maintain parity for cotton and provide the loan funds to maintain it under such conditions; or what would happen to millions of people forced off the land by machines if stores and factories and offices were laying people off instead of hiring more workers?

With moderate unemployment, the conversion program, although slowed down, still could keep moving. With mass unemployment lasting for any considerable time, neither it nor any other kind of program could be effective. Probably, through its emphasis on diversified farming, a conversion program could see farm people through better than others.

Furthermore, an effective agricultural conversion program for the South, through improving the incomes of farm people, would in itself tend to stimulate Nation-wide employment and incomes.

AGRICULTURAL CONVERSION AND INDUSTRIALIZATION

Underemployment on farms no less than the vulnerable position of cotton lies at the root of the South's agricultural difficulties. No broad and lasting gains can be expected until more of the South's families are engaged in industry and trade, and fewer on farms.

The proposed conversion program includes some direct efforts to stimulate nonfarm employment in the region, although broad action to encourage nonfarm employment lies for the most part outside the scope of an agricultural conversion program. But industrial expansion in the South is essential to providing job opportunities for underemployed and displaced agricultural workers. Thus it is important to appraise the potentialities and prospects for such expansion, before getting into details of the conversion program.

Cost of Farm Underemployment

No matter how hard he may work, a man on a farm that is too small or too poor is wasting his skill and energy. Too many people on too little land means lower productiveness and lower income per capita.

An indication of how underemployment on farms can drag down the level of per capita income for a whole area is found in the comparison of incomes for States with contrasting degrees of industrialization. Virginia, West Virginia, and Florida already had 25 percent or less of their workers in farming in 1940. In the same year, however, more than half of all the workers in both Arkansas and Mississippi were engaged in farming. Incomes per person ran about twice as high in the first three States as in Arkansas and Mississippi. The following table shows the distribution of workers, the average incomes for all the States of the region, and indicates an inverse relationship between the proportion of

persons in agriculture and average incomes per person for all members of the working force.

Table 1. - Percentage of workers in agriculture and average incomes per capita of entire population, 14 Southern States, 1940

State	Proportion of workers	Average income per
	engaged in farming	capita of population
	Percent	Dol. per year
Mississippi	59	205
Arkansas	53	257
Alabama	40	266
South Carolina	40	289
Kentucky	37	313
Georgia	36	317
Tennessee	34	319
North Carolina	34	320
Oklahoma	33	360
Louisiana	34	365
West Virginia	16	409
Texas	30	419
Virginia	25	447
Florida	20	472

The shift of workers from agriculture to industry under a conversion program could be expected to increase the average income per worker in the South by about half above the 1940 level. If such a gain were coupled with full employment of the 2,000,000 who were jobless in 1940 and with an increase of 10 percent in the region's population in the next 10 years, total regional income could be expected to rise by about 90 percent.

The Need for Off-Farm Jobs

A fully effective agricultural conversion program for the South could release for other employment about $1\frac{1}{2}$ million owner-operators, tenants, sharecroppers, and laborers who now are in agriculture. In order to provide useful full-time employment within the region for these people, as well as

all the others in the prospective Southern working force, about 13 million nonfarm jobs would be required in 1956, compared with not much over 8 million such jobs in 1940.

Many men and women have left Southern farms and cities since 1940 for the Armed Services and work in war industries. If the South can provide them good jobs after the war, most of them will come back afterwards. In addition, a Southern farm conversion program would release many men from farming, while population growth would add many more workers to the labor force. The following tabulation shows how many new jobs it would take to provide employment in the South for all of them.

In 1940, there were in the South:

Working on farms	4,400,000	persons
Working in nonfarm industry	8,200,000	"
Unemployed workers (on farms and elsewhere)	<u>1,800,000</u>	"
Total labor force, 1940	14,400,000	"
By 1956, usual growth of Southern population will increase this by	<u>1,500,000</u>	"
Total labor force, 1956	15,900,000	"

It is assumed here that part of the young people from the South will continue to move to other sections, as in the past, but that enough remain for Southern population to continue to grow as heretofore.

An agricultural conversion program could, under favorable conditions, reduce the number of people working on farms in the South to about 2,800,000 by 1956. To employ in industry the people released from farming and the others available by that time, would mean that employment would be as follows:

Projected employment, 1956, in the South:

Working on farms	2,800,000	persons
Working in nonfarm industry	<u>13,100,000</u>	"
Total labor force	15,900,000	"

Thus by 1956 an increase of 60 percent in Southern nonfarm employment would be required.

Can the Jobs be Made?

Past history throws some light on how rapidly progress might be made toward industrialization. In the first decade after the last World War, nonagricultural employment in the South increased from 5,762,000 to 7,720,000, an increase of 34 percent. An increase of 60 percent over 16 years (1940 to 1956) would not represent a much faster rate than that maintained during the decade of the 1920's--though, except for war industries which manage to keep going after the war, most of the new increase must be concentrated in the next 10 years.

Study of past experience indicates something of what the future developments might be in the South. Basing these developments on past trends, tentative estimates can be made of the possible extent of shifts in industry and occupations, as shown in the following table.

Table 2.- Gainful workers 10 years old and over, by general division of occupations, for 14 Southern States, 1910-40, and projected numbers for 1956

(All data in thousands of workers)

Division of occupations	Census data (adjusted) 1/				Projected program, 1956
	1910	1920	1930	1940	
Total	11,510	11,438	13,295	<u>2</u> /12,558	15,900
Agriculture, forestry and fishing	6,906	5,676	5,575	4,356	2,820
Nonagricultural	4,604	5,762	7,720	8,202	13,080
Mining	181	315	334	367	600
Manufacturing and mech. industries 3/ ..	1,611	2,028	2,554	2,308	3,960
Transportation and communication	521	662	857	644	950
Trade	663	833	1,224	1,988	3,180
Public service	88	192	185	290	400
Professional service	326	420	651	734	1,250
Domestic and personal service	1,001	911	1,361	1,333	1,690
Clerical occupations ..	213	401	554	538	1,050

1/ Data adjusted to secure maximum comparability between classifications used in different census years. In 1940, data are for employed workers 14 years old and over.

2/ In addition, 1,821,804 workers in these States were on public emergency work, or were unemployed and seeking work, in 1940.

3/ Including construction.

Not all new jobs would be in factories. Instead, the record of the past shows that progress toward industrialization means a balanced growth in all parts of the region's economy--in transportation, trade, professional service, personal service, clerical work, mining--as well as in manufacturing. Out of the nearly 5 million more jobs needed, manufacturing and construction would be expected to provide only about 1.65 million, while the rest could be provided by these other industries.

This proportion of jobs projected for the South in 1956 is consistent with that in the rest of the country in 1940. The South would still have proportionately somewhat more workers in agriculture, and somewhat fewer in mechanical industries, transportation and trade, than the rest of the country had in 1940, but the differences would be far less marked.

Table 3.- Proportion of Southern workers in various industries, 1910, 1940, and projected, 1956, compared with 1940 proportions in the rest of the United States

Industry	South	South	South	Rest of U. S.
	1910	1940	1956	1940 1/
	Percent	Percent	Percent	Percent
All industries	100.0	100.0	100.0	100.0
Agriculture, forestry and fisheries	60.0	34.7	17.7	13.1
Manufacturing, mining, and construction	15.6	21.3	28.7	29.1
Transportation and communication	4.5	5.1	6.0	6.9
Trade	5.8	15.8	20.0	22.9
Domestic and personal service	8.7	10.6	10.6	8.4
Professional service ..	2.8	5.8	7.9	8.0
Public service	0.8	2.3	2.5	2.6
Clerical occupations ..	1.9	4.3	6.6	9.0

1/ Based on 1940 Census, reclassified to compare with earlier censuses.

Probable Paths of Development

The fact that the South has a long way to go to catch up with the rest of the country is a straw in the wind pointing toward increased Southern industrialization, but offers no real proof. There would be small reason to believe the South would come nearer to the national pattern if it lacked the essential human and physical resources.

The South, however, has the necessary resources--the raw materials, the markets, the labor force, and the enterprise. In the past the South never has been able to enjoy the full benefit of its rich resources. From bauxite to peanuts, its raw materials have been shipped elsewhere in large volume for processing.

Such peacetime industries as clothing, house furnishing, paper and printing, and residential construction that have had little or no wartime expansion offer the greatest opportunity for future expansion in the South. A brief glance at the more important of the South's resources gives a good idea of what directions expansion of its industry and trade could take.

Trained Workers and Managers. The greater part of the region's war industries--shipbuilding, munitions making, and military aircraft production--will be either discontinued or greatly curtailed when the war is over. Existence of these industries, however, will offer an excellent starting point for developing nonagricultural employment along more promising lines. The recently built plants are there for conversion. Large numbers of workers and managers trained in war industry will be available for peacetime production. Presence of this skilled personnel would at the start complicate the task of absorbing former farm workers into industry and trade; but in the longer run such a nucleus of trained workers would be essential to the

large-scale regional development required to give productive employment to all of the workers leaving farms.

Market-based industries. Some industries must be located near markets, either because of the high cost of transportation or because of the perishability of the product. The increase in Southern buying power under the conversion program, and especially the great shortage of housing and the general expansion in construction after the war, will make opportunities in almost every Southern community for a variety of market-based industries, such as bakeries, milk bottling plants, brick, tile, and concrete plants, and many others.

Material-based industries. Industries which use large quantities of heavy raw materials must be located near to sources of one or more such materials. Sawmills and pulp and paper mills, pig iron and steel, and food packing, canning, and preserving are all examples. Overhauling of freight rate structures, however, would be required to give many existing and new Southern industries a chance to compete on equal terms with those in other parts of the country.

Iron and steel could be materially expanded for Southern markets-- though some changes in price or production policies of the large steel manufacturers might be required. Simple farm tools and machines, farm wire and fencing, and plumbing and heating equipment, also might be expanded from Southern steel for Southern markets, with a saving in transportation costs.

Ceramic clays, feldspar, slate, and other minerals abound in many parts of the South, and provide a basis for pottery, chinaware, artificial roofing, and other industries.

With proper management of its forest resources, both on farm woodlots and in forests, the South's annual yield of saw timber, and pulp and wood byproducts, could be largely expanded. Wood-working industries catering to Southern markets--kiln drying, finished dimension lumber, mill work for construction, partly fabricated wood parts for furniture and other wood products, and furniture, toys, and other finished wood products, all offer good opportunities.

Initiative-based industries. Many other industries use water, fuel, power, and labor which can be obtained in many different locations, and involve raw materials and finished products of such high value that they can be shipped for long distances without undue transportation costs. Who gets started first is the important thing in development of such enterprises. There are innumerable products of this type that might be expanded in the South, especially for nearby Southern demands--electric light fixtures, small plastic articles such as fountain pens, pencils, and office and home equipment, leather goods, and luggage.

The service industries. Besides these new manufacturing industries, service industries of all sorts--automobile and farm machinery repair and upkeep, electrical supplies and repairs, amusement and recreation industries--will need to expand greatly. The potential demand for a great variety of services is nearly inexhaustible, and will tend to increase as levels of living rise.

Positive Steps to Encourage Industry and Trade

Conditions are generally favorable for a great expansion of nonfarm enterprise in the South. Most of the needed capital can be supplied by private sources, largely within the South itself. But in launching an agricultural

conversion program that will cause many families to seek opportunities off the farm, it will not be enough merely to sit by and hope for the best. Many positive steps can and must be taken by Government to stimulate the expansion of industry and trade in the South and to integrate the new opportunities with the needs of families leaving agriculture.

Aid to New Enterprises

Public agencies can help stimulate nonfarm employment in a number of ways:

1. Federal and State agencies can stimulate and aid community planning groups to study their post-war employment problems, to survey prospective demands, and to plan for expanded local business and employment.
2. In cooperation with industry and engineering authorities, they can prepare information on the post-war prospects in specific industries. This will aid businessmen and community groups to judge the prospective success of such a plant and to select the industries best suited for expanding employment in their community.
3. Federal and State governments can help train displaced or underemployed farmers for industrial work, help them locate suitable jobs, and move their families. Similar retraining and placement services should also be provided for returning war plant workers and veterans, and adequate education provided for growing boys and girls.
4. Where private financing proved insufficient the Federal Government could help finance the new enterprises. This could be done for private business, through RFC, the Federal Reserve Banks, by an extension of Smaller War Plants Corporation for peacetime industry, or by other new financing provisions for small businesses. For farm cooperatives, this could be done through the Farm Credit Administration. Housing will be helped by established housing agencies, especially FHA.

State and Federal Programs

In addition to these efforts to facilitate the entry of former farm people into private industrial and trade employment, State and Federal governments should undertake a joint program for bringing about improvements vitally needed by farm people throughout the whole region. These

include better schools, better roads, improved health facilities, and large-scale forestry projects. Extension of rural electrification, although actually carried out through the initiative of cooperatives and other forms of private initiative, can be greatly stimulated through public credit. Improvement of farm housing is another important objective to be attained through private efforts, including those of cooperatives, but which can be encouraged through either direct Government credit or guarantees of private loans.

The improvements mentioned here are vitally necessary to the successful conversion of Southern agriculture and must be undertaken in any case, whether or not there is any special need for increasing Government spending as an offset to any possible decline in business activity. Public efforts to bring about these improvements in the South can be integrated with the other phases of the conversion program and can be pushed vigorously at the start of the conversion period while the long-range industrialization process is gathering momentum.

Expansion of Agricultural and Food Marketing Facilities

Although food marketing and processing are part of general nonfarm development, the two activities deserve special mention because of their close link with agricultural conversion. Present facilities for processing and distributing Southern farm products would have to be enlarged in order to handle the greatly increased volume of milk, meat, eggs, and truck crops which would result from the conversion program. New dairies, fruit and vegetable assembly markets, packing plants, and storage facilities would have to be provided in plenty of time and in proper localities to handle the increases in farm production. New facilities would mean new jobs.

Expansion would be required in secondary food manufactures located near consuming centers, and in all the wholesale and retail channels by which food reaches the consumer. The new marketing facilities would be needed not only for the additional foods produced in the region, but for added amounts of food from other areas. As underemployed farm workers changed over to productive jobs in industry and trade, and Southern business expanded generally, average incomes in the region would rise sharply. Making allowance for some shifts to more expensive foods, and for increased efficiency per worker as the volume of food marketing increases, it is reasonable to expect that with full employment one-third more workers would be needed than in 1940 to handle distribution of food products in the South. The probable over-all effects of the conversion program on employment and investment in food processing and distribution are summarized very roughly in the following table:

Table 4. - Probable effects of conversion program on requirements for food processing and distribution facilities in the South

Industry	Employment		New investment	
	(14 Southern States):			
	1940	1956		
	Thousands	Thousands	Million dollars	
Food processing	186	240	100	
Retail food stores	182	250		
General merchandise stores	63	60	300	
Eating and drinking places	87	130		
Wholesale food (est.)	100	130		
	617	810	400	

Under favorable conditions, therefore, the total increase in employment would be about 200,000 persons, or nearly one-seventh of the total workers who would shift from farms to industry.

Assistance in Expanding Marketing and Processing Facilities

It is most important to farmers that the new food processing and marketing facilities be available in the right places at the right time.

To a large extent, private initiative, including that of cooperatives, will respond to the new needs, but Federal and State governments can do much to see that the development is prompt and orderly. Public agricultural agencies can give cooperatives and other groups of private investors technical advice as to what kind of processing and marketing facilities will be needed, how they can be built and operated most efficiently, and when and where they will be most likely to be needed. Assistance of this kind will be particularly useful when communities or groups of farmers want to set up their own facilities.

The Federal Government can encourage the needed developments through grants-in-aid to State agricultural colleges, departments of agriculture, and bureaus of markets as well as through offering the technical services of agencies of the U. S. Department of Agriculture.

Also, the various credit agencies of the Federal Government can stimulate development of food marketing and processing facilities by making adequate credit available on favorable terms.

Timing: A Chance That May Not Come Again

The years immediately after the war offer the South an exceptional opportunity to get in on the ground floor of a Nation-wide industrial expansion. During that period--if it is to achieve full employment--the Nation must create new peacetime work-places for 10 million more workers--10 million more than it ever employed in peace. If the South pushes industrialization vigorously in that period, it can expand its industry as part of the Nation-wide expansion without having to "steal" industries from anywhere else.

Once that period is past, and the new industries are created over the country as a whole, the South can expand further only in strong competition for markets and for workers with industries already established in other parts of the country. The next few years the South can grow with the great national post-war expansion. Such an opportunity may not come again this century.

HOW TO CONVERT

In order to direct, strengthen, and supplement the forces already tending toward conversion of Southern agriculture, a positive well-rounded program will be required.

A Competitive Price for Cotton

A price level that will permit American cotton to be sold at prices competitive with other fibers both at home and abroad can be made possible simply through adjustment of Government loan and purchase rates.

Cotton Price Adjustment Payments

The impact of reducing the cotton price, if no supplementary steps accompanied it, would be tremendous. Thus price adjustment payments should be offered to bridge part or all of the gap between the new price and parity. These payments should be based on pre-war cotton acreage allotments, and thus would have no direct relation to a farm's cotton acreage during the period of conversion. The payments should be made on a progressively diminishing scale for a limited period--perhaps 5 years. If a longer period is required for readjustment, the payments might have to be spread over more years, but in this report 5 years is taken as the period over which cotton price adjustment payments would be continued.

During the first year the price adjustment payment per pound of allotment cotton should represent the full difference between market and parity prices. Eighty percent of the difference should be paid the second year, 60 percent the third, 40 percent the fourth, 20 percent the fifth, and none thereafter.

It would not be necessary to delay the start of this program until the income protection provisions of the Steagall Amendment terminate (2 years after the close of the war) because the proposed scale of price adjustment

payments, during the first 2 years of the 5-year period, would at least cover the commitment made in the Steagall Amendment. Division of the price adjustment payments between landlords and tenants would be made according to a definitely established basis fair to both.

Improved Income Opportunities for Farm Families

The cotton price adjustment payments would just be a cushion. To bring about the desirable extent of agricultural conversion quickly and without undue hardships, farm families will need to shift from present types of farming and farming practices to farming systems that would reduce costs, maintain soil resources and provide adequate farm incomes over a period of years with cotton selling at competitive prices. A comprehensive program would be required to help farmers make the desired changes.

Participation in a program of this type would be entirely voluntary, but assistance to farmers desiring help in converting their operations would be conditioned upon their making and carrying out a farm plan which had been approved for technical adequacy.

The Farm Plan

The farm plan should be developed by the farm family in cooperation with a technical worker, and should fit the farm and the family. It should provide for a good system of farming and farm living, including a crop and livestock system adapted to physical resources and to prospective market outlets. The first year's operating plan should be worked out as one step in a 5-year conversion program. Annual operating plans would be worked out each year for the succeeding years of the program.

If the farm is too small at the start to provide an adequate living, and if the family is capable of operating a full-time farm, ways should be sought

to add more land to the farm--either by purchase or long-term lease arrangements. If additional land cannot be found, the farm plan would provide for part-time work off the farm, and the program would include training farm people for such jobs and helping them find off-farm work.

Adequate technical help and guidance would be made available to help farmers put into effect the new patterns of farming, including the practices for which conversion payments would be made.

Conversion Payments. The payments would be contingent upon carrying out practices outlined in the farm plan and would be based on the labor expended by the farmer and his family, as well as the out-of-pocket costs of the practices. They would be made at a uniform rate per unit for a given practice within an area, and would be made only after an inspection revealed that the practice had been carried out in a satisfactory manner.

As in the case of price adjustment payments, the conversion payments would be distributed to the landlord and tenants upon a basis agreed upon in advance and regarded as equitable by persons administering the conversion program. Such an agreement would become a part of the farm plan.

Integration of Credit. Credit to participating farmers would be an integral part of the conversion program. In all probability no new credit agencies would be required; but it would be necessary for the existing credit organizations to goar their operations completely into those of the entire conversion program. Credit needs should be considered when each individual farm plan is worked out; and in turn, the entire farm plan should be considered in connection with a farmer's loan application.

Help in Finding Opportunities Off the Farm

For the farm families who wish to leave agriculture, the conversion program would offer assistance by helping them find purchasers or tenants among other farmers who wished to enlarge their farms. In instances where the farmers and farm workers leaving the farm wanted to enter other lines of work, the program would assist in training them for other occupations, in helping them locate nonfarm jobs in the area, or in financing their travel to places of new employment. Older persons would be helped in locating homes to which they can retire.

Conservation Payments

On farms participating in the conversion program the conservation practices and payments would be included as a part of the more complete program. Separate payments would be made for carrying out conservation practices on farms whose operators were not receiving conversion payments.

The total conservation payments made to an individual farm that did not participate in the conversion program also should be based upon a farm plan, more simple than the conversion plan, but designed to fit the needs of the individual farm. An effort should be made to select and pay for the practices most needed on the individual farm.

How the Program Would Work: Some Examples

Conversion on a Small Farm

The actual application of the program can be illustrated by using a small farm in the Piedmont area as an example. Too much emphasis on row-crop farming there has resulted in serious erosion. Very little of the cropland is suited to large-scale cotton production. Shifts should be out of row crops and toward close-growing crops and pasture. This means more roughage-consuming livestock and larger farms.

This is the way the program could be expected to operate on a 75-acre cotton farm:

Table 5.- Application of the conversion program to a 75-acre cotton farm in the Piedmont area

Crop and Livestock Organization

	Present	After conversion
	<u>Acres</u>	<u>Acres</u>
Land use:		
Cropland	30	50
Unimproved permanent pasture	5	
Improved permanent pasture		30
Woodland	40	70
Total land	75	150
Crops:		
Cotton	5	8
Corn	10	8
Small grain	5	15
Hay	3	15
Rotation pasture	(5)	(15)
Garden and truck	2	3
Idle	5	
Livestock:	Numbers	Numbers
Workstock	1	2
Dairy cows	1	6
All cattle	1	16
Hogs	1	3
Hens	20	50

Table 5.- Continued. Application of the conversion program to a 75-acre cotton farm in the Piedmont area

Estimated Income and Expenses

Present organization	:	After conversion	
Cash income:			
Cotton, $2\frac{1}{2}$ bales @ 19¢ <u>1/</u>	\$ 238	Cotton, 4 bales @ 13¢	\$260
Cottonseed, 2,000 lbs. @ $2\frac{1}{2}$ ¢ <u>2/</u>	50	Cottonseed, 3,200 lbs. @ $2\frac{1}{2}$ ¢	80
Misc. sales	50	Butterfat, 900 lbs. @ 50¢	450
		Cattle, 5 head @ \$40	200
		Poultry and eggs	100
		Woodland products	50
		Misc. truck	50
Total cash sales	\$338		\$1,130
Cash expenses:			
Fertilizer <u>2/</u>	\$ 70	Fertilizer <u>3/</u>	\$ 77
Ginning	15	Ginning	20
Harvest, small grain	10	Harvest, small grain	30
Misc.	25	Seed (mostly lespedeza)	50
Mortgage interest	50	Feed (protein)	50
		Misc.	50
		Mortgage interest	100
Total cash expenses	\$ 170	Total cash expenses	\$ 377
Net cash income	168	Net cash income	753
Perquisites	<u>300</u>	Perquisites	<u>300</u>
Return to operator and family labor <u>4/</u>	\$ 468	Return to operator and family labor <u>4/</u>	\$1,053

1/ 92½ percent of parity price.

2/ Cotton \$35, corn \$25, small grain \$10.

3/ Cotton \$40, small grain \$37.

4/ Excluding Government payments.

Table 5.- Continued. Application of the conversion program to a 75-acre
white-ground cotton farm in the Piedmont area

Expenses, Credit Requirements, and Payments During Conversion

Price Adjustment Payments

First year	proportionate portion had profit formula	\$62.50
Second year		50.00
Third year		37.50
Fourth year		25.00
Fifth year		12.50
Sixth year		none

Cost of Conversion Steps for Which Payments Would be Made

Establish 30 acres permanent pasture	\$ 450
Fence, 80 acres	800
Terracing, 60 acres	60
Farm pond	50
Seeding lespedeza, including phosphate, 15 acres at \$6 (annually for 5 years)	450
Mow pasture 30 acres per year - 5 years	150
Woodland improvement 70 acres @ \$1 per acre for 5 years	350
Total for 5-year period	\$2,310
Average per year	\$ 475

Costs of Conversion Steps for Which Credit Would be Available

Establish 30 acres permanent pasture	\$ 450
Dairy barn and poultry house	500
Dairy heifers, 4 @ \$40	160
Farm enlargement, 75 acres @ \$20	1,500
Total	\$2,160

In the example given, the conversion program would involve combining two of these small cotton farms into one operating unit. The effect of the program in the entire Piedmont area would be to reduce materially the cotton acreage over that planted in the pre-war period, to decrease corn acreage, to increase small grain and hay acreage, to increase the number of dairy cows and chickens, and to decrease the number of farm families by nearly 50 percent.

General application in other areas. The situation in the Coastal Plains is quite similar to that in the Piedmont except that the Coastal Plains has more alternatives to cotton. Fruits, vegetables, tobacco, and peanuts hogged off appear to be profitable alternatives on many farms under the conversion program. As these alternatives are rather intensive enterprises, the displacement of farm families may not be as great as in the Piedmont.

Although the alternatives to cotton vary among areas, the broad pattern of adjustment in other high-cost cotton areas would be similar to those of the Piedmont and Coastal Plains in that cotton acreage would be reduced in comparison to the acreage planted during the pre-war period and in that some farmers would need to obtain nonfarm employment.

Increasing Cotton Acreage on Low-Cost Farms

Most of the farmers in some areas and some farmers in all areas can reduce their cost of producing cotton to such an extent that it will be profitable for them to increase their acreage of cotton even at competitive prices. This may be illustrated by a typical 240-acre farm in the High Plains area in which probable income and expenses under both hand and machine methods are shown before and after adjustment.

Table 6.- Application of the conversion program to a 240-acre farm in the High Plains area

Farm Organization

	Present	Adjusted
	Acres	Acres
Cropland	200	200
Sudan pasture	10	10
Permanent pasture	20	20
Farmstead waste	10	10
Total	240	240
 Cropland		
Cotton	70	140
Grain sorghum	115	45
Other crops	15	15

Estimated Income and Expenses for Cotton and Grain Sorghum 1/

	Present	Adjusted		
	Hand 2/	Machine 3/	Hand 2/	Machine 3/
	Dollars	Dollars	Dollars	Dollars
Income:				
Gross value, lint & seed 4/	3,100	3,100	4,572	4,572
Gross value, grain sorghum 4/	1,288	1,288	504	504
Total	4,388	4,388	5,076	5,076
Expenses:				
Cotton 5/	1,568	897	3,136	1,435
Grain sorghum 5/	785	785	368	368
Total	2,353	1,682	3,504	1,803
Return for operator's labor and management	2,035	2,706	1,572	3,273

1/ Incomes and expenses other than for cotton and grain sorghum assumed to be the same in all cases.

2/ Cotton snipped by hand.

3/ Cotton stripped - 2-row stripper.

4/ Cotton yield 195 lbs. per acre, cottonseed yield 290 lbs., grain sorghum yield 16 bu. Cotton prices "present" (18.96 cents per pound, 92½ percent of parity), "adjusted" 13 cents per pound, grain sorghum 70 cents per bushel.

5/ Cotton expenses decreased 20 percent per acre with machine methods and larger acreage under adjusted organization; grain sorghum expenses increased 20 percent per acre with the smaller acreage.

It will be noted that the cost of producing cotton with machine methods is much lower than when hand methods are used. By reducing costs through mechanization, a farm operator could make a larger return by increasing cotton acreage and selling at competitive prices--13 cents--than he could by growing his present acreage of cotton and receiving 92 $\frac{1}{2}$ percent of parity price (\$3,273 as compared to \$2,706). But if cotton were stripped by hand, the net income would be greater with the smaller acreage and higher price (\$2,035 as compared to \$1,572).

Under conditions of full employment, wage rates likely would be high, and would act as a powerful incentive for substituting machinery for hired labor. This would be true with or without a conversion program. More complete mechanization, especially in the absence of controls on cotton acreage, would tend to increase both the size of farm and the cotton acreage per farm. This would make for a fuller use of a cotton stripper, which in turn would lower per unit costs still further. Thus the difference in income between the present size and organization of farm and the size and organization of farm that would prevail under the new situation could be even wider than shown in the illustration.

The table shows patterns of farm income before and after adjustment in farm organization. During the transition, the farm operator would receive cotton price adjustment payments in the following amounts: First year, \$682.50; second year, \$546.00; third year, \$409.50; fourth year, \$273.00; and fifth year, \$136.50.

In the High Plains cotton area, the program could be expected to result in a sizable increase in cotton acreage and a decrease in grain sorghum acreage. Little, if any, change would occur in other crops. There will be a tendency to increase the size of farms.

Application in other areas. The situation in the Low Plains cotton-producing area is fairly similar to that of the High Plains except that the farms are smaller and mechanization of cotton production has not progressed to the same extent that it has in the High Plains. A large proportion of the farmers in this area likely would prefer to increase their cotton acreage rather than maintain or reduce their acreage and receive conversion payments.

In the Delta, cotton has a high comparative advantage over other crops. The mechanical cotton picker, if successful and economical, would increase further cotton's advantage over competing crops at the same time it reduced the number of workers needed. Flame cultivators, mechanical choppers, and cross-cultivation to reduce hand work in chopping will have the same effect. It is probable that a large proportion of the farmers in this area would choose to increase their cotton acreage.

In the Gulf Coast area of Texas, particularly in the Corpus Christi area, the situation is somewhat similar to the Delta and High Plains.

Training and Placing Workers

Training would be provided for the farm operators and other workers who plan to enter either part- or full-time employment outside of agriculture. Definite courses of instruction would be offered for this purpose. Some of the necessary instruction could be given on the farm before the worker left to take other employment. The remaining instruction could be given in the locality where he is going to work, just before he goes on the job.

There also would be definite programs for recruiting and placing former farm workers in industrial employment. Perhaps as many as three-fifths, or about 900,000, of the farm people who leave agriculture for off-farm work will need definite help in getting placed. Insofar as possible, the new nonfarm employment should be in the South, preferably close to the farm that the worker is leaving.

PROBABLE EFFECTS OF THE PROGRAM

A conversion program for Southern agriculture would result in more diversified farm production throughout the region, larger and fewer farms, fewer farm operators, sharecroppers and farm laborers, substantially increased average farm income per family, a larger percentage of the Southern working force in industry and trade, and a considerably higher average per capita income for the entire region.

Less than 20 percent of the South's working force would be in agriculture, compared with 35 percent in 1940.

Changes in the Farming Pattern

With an annual production of about $13\frac{1}{2}$ million bales, total acreage of cotton would be at least as large, and perhaps somewhat larger, than it was in 1943, depending on the continued rate of increase in average yield. There would be sharp changes, however, on individual farms. Some would have gone out of cotton altogether, some would have decreased cotton acreage drastically, and some would have increased it. In general, cotton acreage would be concentrated on the farms that could produce it most efficiently, with corresponding decreases in cotton acreage elsewhere. Livestock production would be greatly expanded and the cropping pattern much more diversified.

The average acreage of farm land per family in the South would increase from about 110 acres in 1940 to about 170 acres in 1956.

Estimates of some of the more important changes in acreage and production that could be expected to result from the conversion program are shown in the following table.

Table 7.- Production of selected farm products in 14 Southern States
1940, 1943, and at end of conversion period

Product	: Output at :			Estimated	
	: Pre-war : 1943		: end of :	increase	
	: 1940 : output		: conversion:	1940-56	1943-56
				Percent	Percent
Milk, sold and used on farms (billions of pounds, milk equiv.)	19.7	21.7	33.3	69	53
Beef slaughtered (live wt., billion pounds)	3.7	4.44	5.74	55	29
Pork (billion pounds, live wt.)	3.1	4.79	3.69	19	- 23 <u>1/</u>
Chickens and broilers (million pounds, live wt.)	687	1,171	1,201	75	2 $\frac{1}{2}$
Eggs (million dozen)	797	1,129	1,164	46	3
Truck crops (1,000 acres)	936	924	1,224	31	32
Sweetpotatoes (1,000 acres)	598	838	938	57	12
Tobacco (1,000 acres)	1,242	1,311	1,411	14	8
Peanuts for nuts (1,000 acres)	2,040	3,595	3,295	62	- 8

1/ The expected decline in pork production would occur chiefly in slaughter for home use and would have little effect on commercial slaughter.

United States cotton production would total about 13.5 million bales under the conversion program, compared with approximately 12.5 million bales in 1940 and 11.5 million bales in 1943. In the South acreage of improved permanent pasture would increase by about 35 million acres, and of improved farm woodlands by about 65 million acres over the 1943 levels. During the same period acreage of oats would increase by about 8.5 million and tame hay by 3 million. Corn acreage would decrease by about 15.3 million acres, and that of grain sorghums by 1.5 million.

Changes in Farm Income

Gross income from farming in the South, assuming full national employment and price levels approximating those of 1943, would total about $5\frac{1}{2}$ billion dollars a year, compared with an average annual income of less than 3 billion dollars for the pre-war period, and slightly more than 6 billion dollars for 1943. Cotton would account for little more than a fifth of the region's gross farm income instead of nearly a third, as in recent years.

The number of farm families, including operators, sharecroppers, and farm laborers, in the region at the end of the conversion period probably would be about 2,100,000, compared with 3,366,000 in 1940 and 3,007,000 in 1943.

Average gross farm income per family in the South probably would run about around \$2,500 a year or better, compared with \$2,000 in 1943, and an average of about \$865 for the pre-war period.

Effects on Other Regions

Prospects of increases in Southern food production--particularly of milk, meat, eggs, and truck crops--may cause concern among farmers of other regions where those products already are being produced commercially on a large scale. Fears of significant competition from the South do not appear justified, however. Foods whose production would be especially stimulated in the South would, in general, be those in which far too many Southern family diets have been deficient. For example, it is estimated that 2 million additional dairy cows would have been needed to provide even minimum nutritional requirements of the South's urban population in 1940.

To a large extent, the expanded food production would be consumed in the South itself, in addition to present quantities of food now brought in from other regions. In fact, as an increasing proportion of nonfarm employment raises the average level of family incomes in the South, more foods from other regions, rather than less, probably would be needed to meet consumer demands backed up by enlarged purchasing power.

HOW MUCH WOULD CONVERSION COST?

The major steps required to convert Southern agriculture would entail varying degrees of public expense. Actions involving direct Government expenditures would include cotton price adjustment payments on a descending scale, and farm conversion payments for limited periods, in addition to continuing conservation payments. They also would include an expanded volume of credit and programs for training and relocating workers leaving agriculture. The major steps to expand industrialization, although closely related to the agricultural phases of the conversion program, are beyond the scope of this discussion. They would be large, including Government underwriting of a great volume of private investment plus extensive Government credit. The few direct methods by which agricultural agencies could assist in developing industrialization have been mentioned in an earlier section of this report and would involve relatively small administrative expenditures.

Major Direct Costs

The total cost of a conversion program cannot be calculated precisely in advance. Neither can that of any other equally comprehensive action covering the next decade. But on the basis of some arbitrary assumptions that would have to be made in any case, useful estimates can be made.

Price Adjustment Payments

For the purposes of this discussion it is assumed that the war will be over in 1946, that the conversion program will be under way on a large scale in 1947, and that cotton price adjustment payments will be needed for no longer than 5 years. It has been assumed that the world price of cotton will be 15 cents in 1947, 14 cents in 1948, and 13 cents thereafter. It has

also been assumed that the parity price of cotton will remain at about 20½ cents a pound and that the adjustment payments during 1947 and 1948 must be large enough to cover the 92½ percent of parity commitment of the Steagall Amendment.

If adjustment payments were made on 13½ billion bales of cotton annually and reflected 100 percent of the difference between the market price and the parity price in 1947, 80 percent in 1948, and descended at the same rate down to 20 percent in 1951, total payments for the 5-year period would be as follows:

1947 -	\$371,250,000
1948 -	351,000,000
1949 -	303,750,000
1950 -	202,500,000
1951 -	101,250,000

Conversion Payments

In estimating the conversion payments, it has been assumed that about 80 percent of the families on farms needing conversion would enter the program, and that the payments would fully cover the costs of conversion to those families. On such a basis, about 1,450,000 farm families would take part. It also has been assumed that conversion would be started gradually, with 20 percent of the farmers starting in each of the first 3 years (1947, 1948, and 1949) and 10 percent each in 1950 and 1951. It was further assumed that the conversion payments on each individual farm would terminate within a 5-year period.

The 1943 situation was used as a starting point in estimating the total cost of this phase of the program. First, rough estimates were made of the adjustments in size of farm, in the acreage of each major crop, and the number and production of each class of livestock that would be required to provide

each family full employment, a minimum adequate income, and maintain or improve at the same time, land resources. Estimates then were made of the various types of practices that would be needed to effect these adjustments and the probable cost of carrying them out. The unit costs of the different practices were based on cost of materials, seed, and other out-of-pocket expenses plus an allowance for the labor of the operator and his family in putting them into effect.

Under these assumptions and conditions, the schedule of farm conversion payments, by years, would be approximately as follows:

1947 -	\$192,000,000
1948 -	367,000,000
1949 -	540,000,000
1950 -	506,000,000
1951 -	481,000,000
1952 -	297,000,000
1953 -	178,000,000
1954 -	62,000,000
1955 -	31,000,000

Conservation Payments

Payments for conservation would continue to be made to farm families who did not participate in a conversion program. For families taking part in such a program, conservation payments are included in the annual amounts for conversion shown above. As farmers completed their conversion plans, they again would be eligible for regular conservation payments. Basic conservation work done as part of the conversion program would tend to make subsequent annual conservation expenditures lower than they would be without a conversion program and lower than they have been running in recent years. An estimate of annual conservation payments during the conversion period follows:

1947 -	\$68,000,000
1948 -	53,000,000
1949 -	38,000,000
1950 -	30,000,000
1951 -	22,000,000
1952 -	30,000,000
1953 -	38,000,000
1954 -	46,000,000
1955 and thereafter	50,000,000

Training and Relocation

As a result of the conversion program approximately 1,220,000 families, representing about 1,540,000 farm workers, could be expected to leave agriculture.

It would not be necessary to give assistance to this entire number in effecting the shift to nonfarm employment. About one-tenth of the farmers in the South are already part-time farmers with nonfarm employment. Another tenth of the farmers stopping commercial production might be expected to continue living on their farms and not seek regular employment. It would be reasonable to assume further that possibly as many as one-fourth of the working members of the remaining families leaving agriculture would find their own new jobs without special Government help or training. In this event, help would have to be extended only to 60 percent of those shifting from farm to industry, or about 925,000 workers.

It has been assumed that all these workers would require a 9-weeks' general training course. In addition to this general course, which could be given the workers before they left the home farm, it is probable, that about one-half of them would want and need a specialized course which would need to be given at the place of employment or at special training centers.

Funds for helping the families move to new jobs also would be needed, as well as for helping maintain the worker while at the training center. The Government's share of training and relocation expenses might run around \$200 for each worker assisted. Of this total, \$60 would be for the cost of instruction, \$90 for subsistence while training, and \$50 for travel and moving of worker and family. With this per capita, and assuming the farmers will make the change-over the first year their farms enter the program, the annual cost of training and relocation would run a little over 46 million dollars for the first 3 years of the program, and a little over 23 million dollars for each of the next 2 years. The total cost of the 5-year program would be about 185 million dollars.

Recapitulation: Major Direct Costs

The foregoing estimates represent the probable major costs of the conversion program, with the exception of administrative expenses. It has been assumed that the administrative work would be carried out by the field staff of the Department of Agriculture with the assistance of the State colleges and the Extension Service; and that the cost would be no greater than that of the services those agencies are giving at present. The same assumption has been made in regard to credit operations.

The estimated direct costs to the Government of the program, exclusive of its credit phases, would be in the neighborhood of 675 million dollars for the first year, would increase somewhat for the next 2 years, and then steadily decline. The average annual cost for the first 5 years would be slightly over 760 million dollars; for the second 5 years, less than 160 million.

The average yearly cost for the decade would be about 460 million dollars and the continuing cost thereafter, assuming completion of the program on schedule, including increased Southern industrialization and national full employment would be represented by 50 million dollars a year for conservation payments.

Credit Requirements

In addition to the direct cash costs of the conversion program, changes in necessary capital improvements will have to be financed. In many instances a change in the size and type of farm will call for such major improvements as new farm buildings or extensive repairs to existing buildings, as well as purchase of livestock, of machinery and equipment, or of additional land. Thus adequate agricultural credit is an integral part of the conversion program. It probably could be supplied by existing private and public agencies if they take steps to gear their own programs fully to the regional conversion objective. The total loan funds that will be required are estimated to be as follows:

	<u>Million dollars</u>
Farm purchase or enlargement	850
Farm buildings	632
Equipment	632
Livestock	<u>272</u>
Total	2,386

WHAT ABOUT OTHER APPROACHES?

The true measure of the expense of any public program is relative. In examining the possibilities of an agricultural conversion program for the South, the basic questions are these: How do the costs and benefits of a conversion program compare with costs and benefits of other possible approaches? What approach can be expected to return the most in value received to the people of the South and of the whole Nation?

Past Programs

During the 10 years from 1933 to 1942 agricultural programs that related to the South cost the Government an average of about 225 million dollars a year. In the 3 years before we entered the war, the yearly cost averaged more than 325 million dollars. During the 1933-42 period farm returns for cotton, including all types of payment applicable to cotton, averaged 91 percent of parity. Farm income per family in the South averaged \$865 a year. Stocks of cotton under loan or owned by the Government rose from about 2,400,000 bales (inherited from the Farm Board) to a peak of over 11 million bales during 1939. At the end of the decade, because of heavy war demands in the United States and the emphasis placed on food production, the pledged or Government-owned stocks were reduced to slightly over 6 million bales, much of it represented by grades and staples for which there was small demand, particularly in wartime. The costs of Commodity Credit Corporation cotton loan operations do not figure in the average cost figure for the decade, since CCC's operations to date show a book profit due to the rise in cotton prices.

In return for the 225 million dollars a year expenditure, the South and the Nation received undoubted benefits. The farm economy of the area was held together. Progress was made toward soil conservation, more diversification, and other elements of good land use. But all the basic difficulties are still there. Cotton's position at home and abroad still is vulnerable. The great numbers of Southern farm families who depend on cotton for a living are in turn still dependent on year-to-year programs of Federal support.

Possible Courses for the Future

In addition to the conversion program, four other approaches have been discussed seriously as means of aiding Southern agriculture. All four are built around the idea of supporting, by one means or another, incomes of cotton growers.

This section is an attempt to compare the relative costs and possibilities of each of the approaches, first, under conditions that might prevail with full employment; and, second, under conditions of fairly widespread unemployment.

With Full Employment

The chief general assumptions in making the comparison are: (1) That the parity price of cotton will remain at 20.5 cents a pound during the whole period under discussion; (2) that the "world" price of cotton will be 15 cents a pound in 1947, 14 cents in 1948, and 13 cents in 1949 and thereafter; (3) that during the second decade of the conversion program and during the entire course of other programs, agricultural conservation activities in the South will cost the Federal Government about 50 million dollars a year; (4) that land taken out of cotton will be used for purposes yielding the same income per acre as corn, and that Government payments similar to those used in the past would be needed to the extent to which the average annual

cotton production was held under 13,500,000 bales (the estimated production under the conversion approach). In the comparisons of probable costs that follow, only direct expenditures by the Government are included.

With full parity price for all cotton and no export subsidies, no significant export market for U. S. cotton could be expected, and as synthetics captured more and more of the home market, domestic consumption would not be expected to run more than 8 million bales during the first decade after the war, or 7 million bales during the second decade. (This is a conservative estimate. Many people feel that domestic markets would be shrunk by an additional million bales in each of the two decades.) Cotton marketings would be greatly reduced, but the farmer would get his full price in the market place. Stringent acreage and marketing control would be required, together with large-scale benefit payments. The market position of U. S. cotton would be weakened to the advantage of foreign growers and makers of competing fibers. Cost to the Government would run over 375 million dollars a year for the first decade, and nearly 450 million during the second.

With parity price for all cotton with exports subsidized to the world price, the domestic position of cotton would be as weak as under the approach just discussed (with consumption running 8 and 7 million bales or less for the first and second decades respectively). Under the spur of subsidies, exports would perhaps average 4 million bales a year for the first decade, but might well grow smaller and smaller as a result of foreign reprisals against the subsidies. Acreage and marketing controls and benefit payments would be required. Those payments, plus export subsidies, would be major items in a probable total annual expense to the Government of more than 275 million dollars during the first decade and about 350 million dollars during the second.

With parity price for domestically used cotton and world prices for exports, domestic consumption would be as small and its market position as weak as under the first two approaches. Exports, with no outright subsidy to give direct provocation to foreign reprisals, would perhaps run around $4\frac{1}{2}$ million bales a year or slightly more than if direct subsidies were used. Some measure of control would be needed to keep supplies in line with limited domestic consumption at full parity. Growers would in effect receive a blended price for cotton, considerably lower than parity. Cost to the Government would run around 110 million dollars for the first decade, and 170 million for the second.

With a world price for all cotton, supplemented with income payments, domestic consumption of 9 million bales a year and exports of $4\frac{1}{2}$ million bales could be expected during both decades. Cotton would be in a strong competitive position, but growers would be dependent on large year-to-year appropriations. Substantial income payments would be needed to make up the difference between the world price and the parity price for cotton. Cost of the program to the Government would run somewhat under 550 million dollars a year for the first decade, slightly above 550 million in the second.

With the conversion program, the pattern of cotton consumption would be similar to that of the approach just mentioned (total foreign and domestic use of $13\frac{1}{2}$ million bales for both decades). Cotton would be in a strong competitive position. No acreage control would be needed. Income and conversion payments would be major items in an average cost to the Government of 460 million dollars a year for the first decade. For the second decade and thereafter, with Southern agriculture on a firmer footing, the annual cost would consist of 50 million dollars a year for the continuing conservation program.

Except for the conversion program, each of the other approaches would tend, to a greater or lesser degree, toward perpetuating the conditions that originally made Government aid necessary. In addition, under all three of the approaches calling for parity price for cotton used in this country, U. S. consumers would pay substantially more for cotton products than under the approaches calling for a competitive price for all cotton, and the burden of the higher cost of cotton goods would fall relatively hardest on families with low incomes.

Average annual gross farm income, under the stated assumptions for the several programs, might be expected to range between $5\frac{1}{4}$ and $5\frac{3}{4}$ billion dollars a year to farmers in the Cotton South. The differences themselves may not seem so great, but the sources of income under each of the programs and the number of farm families among which it must be divided also must be considered.

The conversion program, which would cost the Government the second most in the first decade and would be by far the cheapest thereafter so far as cost to the Government is concerned, could be expected to yield the largest farm income in both the first and second decades. That is, the increase in incomes from sales of commodities other than cotton should more than offset the reduction of several hundred million dollars in Government payments, once the program is under way.

The use of income payments to supplement world price for cotton would yield the next highest income and would maintain the market for cotton, but it would also be the most costly to the Government.

Straight parity prices for all cotton, and the combination of parity prices for home use with farmers themselves selling at world prices in the export market, would yield the two smallest farm incomes, but their costs to the Government would be quite different. Pricing all cotton to parity would result in a costly and difficult Government program, while the other approach would require the smallest direct Government outlay in the first decade, and the next smallest thereafter.

With parity price to farmers for all cotton and exports subsidized to the world price by the Government, both costs to the Government and incomes to farmers would be on an intermediate level.

Since the conversion program could be expected to result in a considerably smaller number of farm families than any of the other approaches, its advantage over them would be markedly greater in terms of farm income per farm family than in terms of the regional total. Average gross farm income per farm family in the South might well run about one-third to one-half greater under the conversion approach than under the other approaches, or about \$2,500 a year.

With Considerable Unemployment

If there should be a depression after the war, cotton farmers, together with everyone else, would be much worse off than under full employment conditions. There would, however, be few marked changes in the relative costs and effects of the five programs.

For the purposes of comparison, let us assume that 7 million persons would be unemployed in the period from 1951 to 1956, and that as a result the parity price of cotton would fall to $17\frac{1}{2}$ cents a pound, and the world

price to 12 cents. Let us also assume that the largest amount of cotton that could be consumed at freely competitive prices would be $11\frac{1}{2}$ million bales instead of $13\frac{1}{2}$ under full employment, and that under all five of the programs Government payments of one kind or another would make up half of the difference between the value at parity price of $13\frac{1}{2}$ million bales (plus that of the corresponding amount of cottonseed) and that of U. S. cotton and cottonseed actually used at prevailing prices in this country or abroad.

Annual gross farm income for the South would range between $4\frac{1}{2}$ and $4\frac{1}{4}$ billion dollars under the different approaches. It still probably would be greatest under the conversion program, and smallest with parity for domestic consumption and a world price for exports. The last-named approach still would be the least costly to the Government, with expenses estimated at slightly under 200 million dollars a year. With considerable unemployment, the conversion program would be next cheapest, costing about 275 million dollars. The world-price-and-income-payment approach still would be the most costly--nearly 470 million dollars a year. As under full employment, the conversion program would tend to result in the smallest number of farm families, and consequently in correspondingly larger incomes per farm family. Actual numbers who would leave farms in times of depression under the conversion are hard to estimate. With widespread unemployment they would naturally share the hazards of other nonagricultural workers. However, even should these workers remain on farms, average farm incomes per family still would be largest under the conversion program.

SUMMARY

Steadily rising competition from foreign growths and synthetics is making the position of United States cotton growers increasingly precarious. If the farm price of cotton is maintained at or near parity in the years after the war, export and domestic markets will be seriously reduced. Yet large numbers of cotton farmers would find it impossible to continue to grow cotton at freely competitive prices.

The position of all of Southern agriculture is seriously jeopardized, for cotton is by far the most important cash crop of the area and is grown by half of the South's farm families.

Also, the difficulties besetting cotton as a commodity are not the only threat to the future well-being of Southern farm people. Large numbers of them are seriously underemployed, on farms that are either too small or for other reasons too unproductive to fully utilize the skill and labor of a farm family and to yield an adequate family living. During the decade ending with 1942, farm income per family in the South was less than half that of farm families in the rest of the country. Immediate difficulties are heightened as mechanization and other improvements in the technology of agricultural production push more and more families off their farms and often completely out of agriculture. After the war, even more rapid gains in mechanization are in prospect. For the long run, mechanization holds promise of more productiveness and better incomes. For the short run, without careful management it can mean great distress.

In the tangled situation two facts stand out. First, efforts to maintain the position of cotton artificially are, in the long run, almost certainly doomed to failure. Price maintenace means loss of the export trade and reduction of home markets, as well as an eventual choice between drastic acreage control and the piling up of an unmanageable surplus. Export subsidies invite retaliation. Support of cotton through income payments to growers means increasing dependence of Southern farmers on large year-to-year Federal appropriations. Neither course would cure the situation; both would tend to perpetuate the conditions that made Federal aid necessary.

Second, strong tides toward more diversified farming and displacement of many farm families already are running in the agricultural South. Efforts to prop up cotton artificially could not stem that tide; they would only cause dangerous cross-currents.

Another course is open--an agricultural conversion program to take full advantage of the tides that are running and to harness their power constructively. Such a conversion program would call for a competitive price for all cotton so as to increase consumption and encourage production of the South's leading crop by farmers who could grow it efficiently. A conversion program also would assist farmers who cannot grow cotton profitably to shift to other farm enterprises, and would assist underemployed members of the region's dense farm population to leave agriculture altogether for productive work in industry or trade. Conversion would mean fewer and larger farms, better farm incomes, and a higher agricultural income for the whole region.

Hand in hand with the agricultural conversion program would go a broad program to encourage greater industrialization in the South. Obviously, people should not be encouraged to leave farms unless they have good jobs to go to in other lines. Also, more industry and trade in the South will mean better markets for the farm people who remain on the land.

In the decade after the last war, without the aid of any definite program

nonagricultural employment in the South increased by a third. A nearly two-thirds increase will be required in the decade after this war to provide full-time jobs for all of the working force of the area, including those who leave farms. The South has the basic human and physical resources for such an increase. An integrated program of technical assistance and credit would greatly stimulate such a development. Although interdependent, and closely related as to timing, the agricultural and industrial programs would of necessity operate separately. Local, State and Federal agricultural agencies and organizations that would handle much of the job of farm conversion are not equipped for widespread action in the nonfarm field.

An outstanding exception is development of new processing and marketing facilities for the new products that would be produced on Southern farms. There, agriculture has a direct interest in adequate and well-timed development, and a large contribution to make.

Essentials of the agricultural conversion program would consist of:

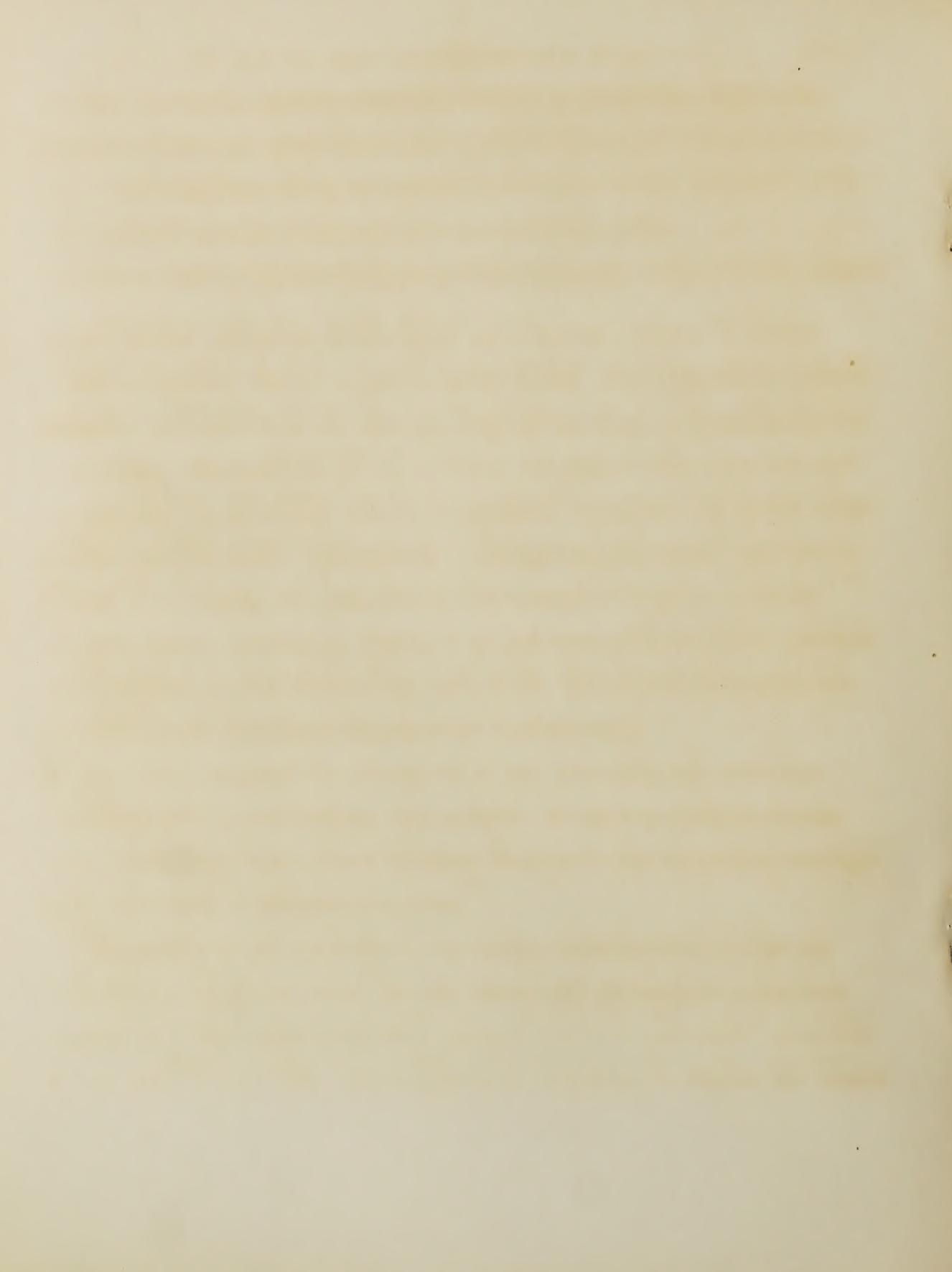
- (1) A freely competitive price for all cotton, (2) cotton price adjustment payments on a descending scale for a limited period to cushion the drop from present price levels, (3) a broad program of assistance to farmers who needed

to go out of cotton, reduce their cotton acreage, enlarge their farms, or make other basic changes in order to establish a stable, diversified pattern of farming that could best be expected to yield adequate incomes, (4) an integrated system of conversion payments and credit facilities to help farmers make the required changes, with aid conditioned on following long-range individual farm plans, and (5) a program for training for other work farm people who wanted to leave agriculture and of helping them locate jobs and establish themselves.

Under conditions of full national employment, the active phase of the conversion program could be completed in 10 years. The diminishing cotton price adjustments would be made during a 5-year period. Conversion of individual farms also could be accomplished in 5 years, but it would be reasonable to expect farmers to enter such a program in different years during the decade.

While full national employment would speed the conversion program and enhance its benefits, the success of the program would not be dependent on full employment. Even with considerable unemployment, the conversion program would have advantages over other possible approaches.

During the first decade, the conversion program might cost the Federal Government an average of 460 million dollars a year. This sum would be something more than 100 million dollars larger than the average cost of farm programs in the South during the 3 years before the war. It would be larger than the estimated cost of some of the alternative approaches for the future, smaller than that of others. It could be expected, however, to result in the greatest farm income for the region, and because of the smaller number of farm families, an even larger relative advantage in income per farm family.



During the second decade and thereafter, the conversion program, while it still could be expected to yield the largest farm income, would be by far the least expensive of the possible approaches. Once the major phase of agricultural conversion had been completed, the cost to the Government would be confined to that of a continuing conservation program. The other approaches, since they would not have cured fundamental weaknesses, would cost more in the second decade than in the first.

Carrying out a truly effective conversion program would require changes in well-established patterns of farming and habits of thought. Prejudices and educational deficiencies would have to be taken into account and overcome. Determined effort and close cooperation on the part of farm and city people and local, State and Federal governments would be required. In a word, the difficulties would be great.

But the gains could be tremendous. Alone of all possible approaches, the conversion program offers a way toward curing, and not merely palliating, the ills that have beset the agriculture of the South.

